

**DESC's Interpretation of Mr. Hochgraf Allegation #1**

Mr. Hochgraf alleges that "[t]he electrical power that [DESC] provides to [his] new house is not reliable."

**DESC Answer #1:**

DESC denies this allegation. DESC avers that its electric service is reliable (and Mr. Hochgraf has not presented any evidence demonstrating otherwise). DESC avers that in 2020, the System Average Interruption Duration Index ("SAIDI")—the average total minutes of outage time for a customer in a year—was better (i.e., lower) for the circuit serving Mr. Hochgraf's residence than the SAIDI for the Low Country District and the DESC system as a whole. DESC further avers that, in his April 6, 2021 email to Ms. Kimberly Eads and Mr. Richard Gilbert of Dominion Energy South Carolina, Inc., Mr. Hochgraf references the two-week voltage monitoring that DESC conducted from October 20, 2020, to November 2, 2020, and states that "[w]e haven't spoken recently because the power delivery has been stable." What Mr. Hochgraf complains about are the circuit breakers which were installed in his home by a third party (not DESC) and which are downstream of the point at which DESC provides its service. DESC is not responsible for the operation of the circuit breakers, which are the Customer's equipment and located downstream of the point at which DESC provides its service. Paragraph V.A. of the Company's Commission approved General Terms & Conditions for Electric Service provides as follows:

The Company shall not be in any way responsible or liable for damages to or injuries sustained by the Customer or others, or by the equipment of the Customer or others by reason of the condition or character of Customer's wiring and equipment, or the wiring and equipment of others on the Customer's premises. The Company will not be responsible for the use; care or handling of electricity delivered to the Customer after it passes the service point. The Customer assumes responsibility and liability for damages and injuries caused by failures or malfunctions of Customer's equipment

**Hochgraf Response # 1**

1. The reliability of DESC power during normal operation is not relevant to this matter. What I am alleging is that the power delivered to my house as it is failing during a power outage event causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.
2. DESC stated that I said "we haven't spoken recently because the power delivery has been stable." That is correct; however DESC took my email out of context by selectively editing my email. The complete context reads: "We haven't spoken recently because the power delivery has been stable. When we last spoke, you said to contact you if/when we have any problems. I've attached a photo of my breakers. Please note the symmetry – ***every other breaker tripped.***"

Neither Kimberly Eads nor Richard Gilbert responded to my email in which I requested their assistance back on 04/06/2021.

Immediately below is my complete email as referenced by DESC (highlighted for emphasis):

**From:** Mike Hochgraf <mikehoch@icloud.com>  
**Sent:** Tuesday, April 6, 2021 4:46 PM  
**To:** 'kimberly.eads@dominionenergy.com' <kimberly.eads@dominionenergy.com>;  
'richard.gilbert@dominionenergy.com' <richard.gilbert@dominionenergy.com>  
**Subject:** Cresswind (The Ponds) Power Interruption Tuesday 04/06/2021 @ 2:15 PM (duration about 5 minutes)  
**Importance:** High

Good afternoon Kimberly, Richard,

This is to follow-up on the long-standing circuit breaker tripping issue in the Cresswind (Ponds) development.

This afternoon at approximately 2:15 PM, the Crestwood development (and the Ponds) experienced a brief power outage. I have received multiple reports of multiple breakers within the Cresswind Community.

As you recall, you both performed a one-month instrument audit of the power delivery in my house in November/December 2020 and found it to be within specs. At the same time, Power Plus Systems (the electrical service installer for the entire development) replaced my breakers back on 11/23/2020 with the new Eaton "TL" version, supposedly resistant to power sags.

We haven't spoken recently because the power delivery has been stable. When we last spoke, you said to contact you if/when we have any problems. I've attached a photo of my breakers. Please note the symmetry – ***every other breaker tripped.***

Was there anything in today power interruption that would explain the widespread problem with our circuit breakers tripping?

What can be done to resolve this ongoing issue and ensure this doesn't continue to occur?

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

### **DESC's Interpretation of Mr. Hochgraf Allegation #2**

Mr. Hochgraf further alleges that "[t]here is documented history detailing that [DESC]'s electrical service to [his] new house (and widespread through other houses in specific areas within [his] NEW community) often causes the GFCI/AFCI (arcfault) circuit breakers in my new house to trip upon power failure and/or upon restoration."

DESC Answer #2: DESC denies the allegation that its electric service "often causes the GFCI/AFCI circuit breakers in [his] new house to trip." Mr. Hochgraf has not provided any such documented history demonstrating that DESC's electric service "causes the GFCI/AFCI circuit breakers in [his] new house to trip" or that the persistent, "multiple simultaneous AFCI trips" that he is allegedly experiencing in his own house are "widespread" in specific areas within his community.

Furthermore, DESC avers that its service is reliable and that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1.

### **Hochgraf Response # 2**

I have answered this in "Part A", and "Part B".

**Part A response** proves this problem is "widespread in specific areas of my community". The graphic below provides circuit breaker tripping data from the power outage on Friday June 11, 2021, from approximately 2:50 PM to approximately 3:05 PM. The source of the data is 35 separate emails sent to me by residents in Cresswind phases 3, 4, and 5 who experienced circuit breakers that tripped from the power outage. In some of the emails, the residents indicate that this is a historical problem, not limited to the recent power outage (**combined into one PDF and marked Hochgraf Exhibit "B"**). Those separate emails from each resident are proof of each resident's circuit breaker tripping and have been submitted as individual attachments. The name of each the attachment is shown in the summary information below.

Resident	House Number	Street Name	Phase	Number of breakers tripped 06/11/2021	Supporting Documentation File Name
Clark, Jim MD.	114	Citrea Drive	3	6	Clark_06112021.docx
Brennan, Sharon	122	Citrea Drive	3	5	Brennan_06112021.docx
Morgan, Robert	3057	Cross Vine	3	5	Morgan_06112021.docx
Lee, Gary	3053	Cross Vine Lane	3	6	Lee_06112021.docx
Lazzaro, Matt	3096	Cross Vine Lane	3	3	Lazzaro_06112021.docx
Nash, Fred	3107	Cross Vine Lane	3	5	Nash_06112021.docx
DiPinto, Steve	3108	Cross Vine Lane	3	6	DiPinto_06112021.docx
Durflinger, Wayne	3124	Cross Vine Lane	3	7	Durflinger_06112021.docx
Taurence, Larry	3132	Cross Vine Lane	3	3	Taurence_06112021.docx
Beres, Greg	3135	Cross Vine Lane	3	8	Beres_06112021.docx
Graves, Lamar	3136	Cross Vine Lane	3	2	Graves_06112021.docx
Holmes, Tonya	3139	Cross Vine Lane	3	6	Holmes_06112021.docx
Berger, Ed	3140	Cross Vine Lane	3	8	Berger_06112021.docx
Hochgraf, Mike	3144	Cross Vine Lane	3	1	Hochgraf_06112021.docx
Lyttle, Bill	3145	Cross Vine Lane	3	3	Lyttle_06112021.docx
Feniola, Lou	3052	Cross Vine Lane	3	2	Feniola_06112021.docx
Cerqueira, Richard	3120	Cross Vine Lane	3	6	Cerq_06112021.docx
Hay, Cliff	3128	Cross Vine Lane	3	6	Hay_06112021.docx
Gardner, Jim	3003	Aura Lane	4	6	Gardner_06112021.docx
Brower, Paul	3030	Aura Lane	4	7	Brower_06112021.docx
DeTurk, Rick	3035	Aura Lane	4	2	DeTurk_06112021.docx
Farr, Thomas	4018	Aura Lane	4	7	Farr_06112021.docx
Monte, Linda Marie	2032	Barn Swallow Road	4	3	Monte_06112021.docx
Karlberg, Gregg	2037	Barn Swallow Road	4	7	Karlberg_06112021.docx
Fancher, Susan	2045	Barn Swallow Road	4	10	Fancher_06112021.docx
Berman, Charles	2068	Barn Swallow Road	4	4	Berman_06112021.docx
Carlson, Greg	2066	Barn Swallow Road	4	3	Carlson_06112021.docx
Johns, Carl	102	Blackbird Loop	4	4	Johns_06112021.docx
Bosco, Lou	1095	Old Field Drive	4	6	Bosco_06112021.docx
Cronin, Don	1100	Old Field Drive	4	5	Cronin_06112021.docx
Macomber, Sandy	1101	Old Field Drive	4	2	Macomber_06112021.docx
Sawyer, Bill	1143	Old Field Drive	4	4	Sawyer_06112021.docx
Matheson, Bob	1168	Old Field Drive	4	3	Matheson_06112021.docx
Ciaccia, Mike	1139	Old Field Drive	4	1	Ciaccia_06112021.docx
Dumouchel, Sue Wasnewsky	5061	Song Sparrow Way	5	2	Dumouchel_06112021.docx

**Part B response** I have included five emails which prove DESC was made aware that the problem is "widespread" in my community. Highlighted to show relevance.

**Part B Response Email # 1**

My 04/06/21 email to Kimberly Eads and Richard Gilbert:

**From:** Mike Hochgraf <mikehoch@icloud.com>

**Sent:** Tuesday, April 6, 2021 4:46 PM

**To:** 'kimberly.eads@dominionenergy.com' <kimberly.eads@dominionenergy.com>;  
'richard.gilbert@dominionenergy.com' <richard.gilbert@dominionenergy.com>

**Subject:** Cresswind (The Ponds) Power Interruption Tuesday 04/06/2021 @ 2:15 PM (duration about 5 minutes)

**Importance:** High

Good afternoon Kimberly, Richard,

This is to follow-up on the long-standing circuit breaker tripping issue in the Cresswind (Ponds) development.

This afternoon at approximately 2:15 PM, the Crestwood development (and the Ponds) experienced a brief power outage. I have received multiple reports of multiple breakers within the Cresswind Community.

As you recall, you both performed a one-month instrument audit of the power delivery in my house in November/December 2020 and found it to be within specs. At the same time, Power Plus Systems (the electrical service installer for the entire development) replaced my breakers back on 11/23/2020 with the new Eaton "TL" version, supposedly resistant to power sags.

We haven't spoken recently because the power delivery has been stable. When we last spoke, you said to contact you if/when we have any problems. I've attached a photo of my breakers. Please note the symmetry – **every other breaker tripped**.

Was there anything in today power interruption that would explain the widespread problem with our circuit breakers tripping?

What can be done to resolve this ongoing issue and ensure this doesn't continue to occur?

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

### **Part B Response Email # 2**

My 11/16/2020 Email to Kimberly Eads and Richard Gilbert

**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Monday, November 16, 2020 10:09 AM  
**To:** 'kimberly.eads@dominionenergy.com' <[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)>  
**Cc:** 'richard.gilbert@dominionenergy.com' <[richard.gilbert@dominionenergy.com](mailto:richard.gilbert@dominionenergy.com)>  
**Subject:** Cresswind (The Ponds) Power Interruption Saturday 11/14/2020 @ 10:40 AM

Good morning,

Just to update you since the power is being monitored at the electrical box on my property.

On Saturday 11/14/2020 at 10:40 AM, we had a power interruption. It lasted about 1 second after which it was restored fully unlike some previous power interruptions which failed to restore fully on the first attempt. Didn't last long enough for generators to activate.

There were minimal reports for AFCI breakers tripping, perhaps due to the short duration. I anticipate receiving notifications from the people monitoring for me as they realize something may not be working. I noticed it because I was using a light using house power.

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

### **Part B Response Email # 3**

My 09/04/2020 email to my support group summarizing the 3-way phone conversation between Richard Gilbert from Dominion Energy and Chris Waltz Owner and CEO of Power Plus Systems (the only electrical contractor installing the electrical service on new homes in the Cresswind development). I initiated this conversation in order to ensure Dominion and Power Plus Systems had the same information and could share technical information and ideas. The widespread nature of the failures within the Cresswind Community was part of the discussions. Mr. Gilbert chose my house for the test device because the test devices are very expensive and in short supply.

**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Friday, September 4, 2020 2:19 PM  
**To:** 'Carl Johns' <[cjohns57@comcast.net](mailto:cjohns57@comcast.net)>; 'Robert Morgan' <[robert.n.morgan.jr@gmail.com](mailto:robert.n.morgan.jr@gmail.com)>; 'kahoscott281@gmail.com' <[kahoscott281@gmail.com](mailto:kahoscott281@gmail.com)>; 'Bosco, Lou' <[ljbrt@comcast.net](mailto:ljbrt@comcast.net)>; 'wllmbzz@aol.com' <[wllmbzz@aol.com](mailto:wllmbzz@aol.com)>; 'Lyttle Bill' <[whlyttle1034@gmail.com](mailto:whlyttle1034@gmail.com)>; 'Ed Berger'

<ed@gaberger.com>; 'ltkdg@bellsouth.net' <ltkdg@bellsouth.net>; 'dfalky@homesc.com' <dfalky@homesc.com>; 'Trask Roland' <Rolandetraskjr@gmail.com>; 'sdipinto@aol.com' <sdipinto@aol.com>; Lee, Gary <mjandgary@gmail.com>; Matheson, Bob <docb953@gmail.com>

**Subject:** RE: Circuit Breaker Problem Update 09/04/2020 (2nd update)

To all,

I just concluded a lengthy three-way phone conversation with Chris Waltz, Owner/CEO of Power Plus Systems and Richard Gilbert, Dominion Summerville Operations Manager.

Much of the conversation was technical between Richard and Chris; they reviewed my outage data and had me verify certain conditions on my circuit breaker box.

Richard will review this today (if the people are available now due to upcoming the holiday) with the Manager of the Power Quality Department for their action.

His initial thought is that Dominion will install a power monitoring device, possibly at my house.

He requested, for future power outages (until this is resolved) that we note the condition of the power outage. For example – did the power fail and then stay off, or did the power fail and instantaneously try to come back on... and how many times. You can email me with your observations. This is important information and he asked me to contact him directly with this data.

Chris is also going to investigate some of the possibilities they discussed.

Everyone is now on the same page, and the correct people are looking at our problem.

Thanks for your support.

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

**Part B Response EMAIL # 4** (this is an email chain) Again detailing that DESC was made aware of the circuit breaker problem, this time by Jeff Vandewiel, Kolter Community Project Director for Cresswind Charleston who notified his contact at Dominion.

**From:** Jeff Vandewiel <jvandewiel@kolter.com>

**Sent:** Tuesday, April 20, 2021 10:04 AM

**To:** Mike Hochgraf <mikehoch@icloud.com>

**Subject:** RE: For Your Attention, Please - Widespread Circuit Breaker (AFCI) Problem

Good morning Mike,

Thanks for your email. I did reach out to Chris Waltz again on this issue, but unfortunately my contact at Dominion was unable to provide any insight on the matter. He mainly deals with new construction and just pointed me in the same direction as you to reach out to Richard Gilbert. I do maintain that Chris' (Power Plus) logic remains sound to me. If this truly were a breaker issue we would see it everywhere, other phases of The Ponds, and numerous other communities around the tri-county area. I am by no means an expert, but it definitely sounds like a power supply issue to me???

Jeff Vandewiel  
Community Director  
Charleston Division  
Kolter Homes LLC  
Office: 843-832-6100  
Cell: 843-514-3659

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**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Friday, April 16, 2021 6:35 PM  
**To:** Jeff Vandewiel <[jvandewiel@kolter.com](mailto:jvandewiel@kolter.com)>  
**Subject:** FW: For Your Attention, Please - Widespread Circuit Breaker (AFCI) Problem

[External Email]

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Good evening Jeff,

On 09/30/2020, I first brought this serious matter to your attention.

I am writing to you again because the problem has not been resolved. For your information, I am still the main representative who is coordinating the actions between Dominion and Power Plus Systems to rectify the ongoing problems with circuit breakers which trip after a power failure.

#### **SUMMARY**

There is an ongoing widespread situation in the Cresswind community whereby AFCI circuit breakers trip after/during a power outage. This is not normal circuit breaker tripping, but rather multiple simultaneous AFCI trips immediately upon power failure (and perhaps upon a brief attempt on power restore). Both Dominion Energy and Power Plus Systems concur that circuit breakers tripping in this manner are not a normal condition. The problem began before 2020; I began to formally document it starting in June 2020. On April 6, 2021, we experienced a power outage with widespread examples of circuit breakers tripping upon power failure.



I am still the primary coordinator who has been submitting power failure data to Dominion Energy, and Power Plus Systems to assist them with unique problem, using data that is being formally collected. Beginning in 2020, I have been in personal contact with both Dominion Power (Richard Gilbert, Manager of Electrical Distribution Operations, Summerville) and Chris Waltz (CEO of Power Plus Systems). Both companies acknowledge this is a problem unique to Cresswind, and particularly "interesting" that it is limited to phases 3, 4, and 5 – phases 1 and 2 do not seem to be affected.

Regarding the power outage on April 6, 2021, Chris Waltz followed up with Eaton Engineering (the circuit breaker manufacturer) on my notification email to him on April 6, 2021, wherein I notified him (and Dominion) that I had 9 of 18 AFCI circuit breakers trip from the power outage. That is particularly troubling, because as a direct result of my efforts to resolve this problem, Power Plus Systems replaced all 18 of my Arc Fault circuit breakers on 11/23/2020. This was at the direction of Eaton Engineering and the new circuit breakers were the latest and redesigned "TL" version. These redesigned circuit breakers were supposed to eliminate the tripping-on-power-fail problem. However, they have not eliminated the problem. Incidentally, these are the same type breakers that Power Plus System is installing in new Cresswind houses. On our phone call on April 9, 2021, Chris Waltz told me that the Eaton Engineers analyzed the photo I sent of my tripped breakers and unquestionably concluded that the pattern of the failed circuit breakers ("A" leg, "phasing" problem) were caused by a power supply problem, not associated with a normal power outage. Chris Waltz also told me that he had been contacted by someone in Cresswind that had all of their GFCI breakers trip. Chris said he would update me once he had the person's address and compare how close it was to my house. However, as of writing this email, Chris has not yet contacted me.

Additionally, as a direct result of my efforts to resolve this problem, Dominion Energy performed a six-week instrument analysis (October – November 2020) of the power delivered to my house. Kimberly Eads (Dominion Power Quality Manager, Summerville) concluded that the delivered power was "within specs". I advised her and Richard Gilbert, that the only relevant data we required was not analyzed – that of what occurs during a power failure. During the test period, there was not a power outage.

Dominion Energy (Richard Gilbert, Manager of Electrical Distribution Operations, Summerville) has failed to respond to my multiple emails and phone messages since April 6, 2021.

This seems to be the appropriate time to again bring this serious problem to Kolter's attention. In addition to homeowners enduring tripped circuit breakers, there are increasingly homeowners in Cresswind who rely on medical devices. Some of them have installed whole house generators, but the generators cannot supply power when the circuit breakers have tripped.

Perhaps Kolter can assist by facilitating the additional focus required between Dominion Energy and Power Plus Systems to remedy this problem as soon as possible without involving outside agencies.

There are many details supporting this information. I am willing to meet with you to review them and discuss next steps.

In your response to me (email below) on October 5, 2020, you stated that:

*"In researching this it seems to be a power supply issue causing an abnormal amount of power outages. Power Plus installs these breakers in all their homes without these types of issues. I will reach out to my contact at Dominion to see if I can get some answers".*

Did Dominion address this concern?

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Monday, October 5, 2020 4:15 PM  
**To:** 'Jeff Vandewiel' <[jvandewiel@kolter.com](mailto:jvandewiel@kolter.com)>  
**Subject:** RE: For Your Attention, Please - Widespread Circuit Breaker (AFCI) Problem

Jeff,

Thank you.

Please let me know if I can be of any assistance.

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

**From:** Jeff Vandewiel <[jvandewiel@kolter.com](mailto:jvandewiel@kolter.com)>  
**Sent:** Monday, October 5, 2020 3:41 PM  
**To:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Subject:** RE: For Your Attention, Please - Widespread Circuit Breaker (AFCI) Problem

Good afternoon,

In researching this it seems to be a power supply issue causing an abnormal amount of power outages. Power Plus installs these breakers in all their homes without these types of issues. I will reach out to my contact at Dominion to see if I can get some answers. Thanks.

Jeff Vandewiel  
Community Director  
Charleston Division  
Kolter Homes LLC  
Office: 843-832-6100  
Cell: 843-514-3659

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**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Wednesday, September 30, 2020 11:50 AM  
**To:** Jeff Vandewiel <[jvandewiel@kolter.com](mailto:jvandewiel@kolter.com)>  
**Subject:** For Your Attention, Please - Widespread Circuit Breaker (AFCI) Problem

Good morning Jeff,

I would like to bring a serious matter to your attention.

I am writing this as the representative who is coordinating these activities.

There is a widespread situation in the Cresswind community whereby AFCI circuit breakers trip after/during a power outage. This is not normal circuit breaker tripping, but rather multiple simultaneous AFCI trips immediately upon power failure (and perhaps upon a brief attempt on power restore). Both Dominion Energy and Power Plus Systems concur that circuit breakers tripping in this manner are not a normal condition.

Dominion Energy, and at the behest of Dominion, EPRI - Electric Power Research Institute, and Power Plus Systems are engaged in solving this unique problem, using data that is being formally collected.

The data collection is still ongoing; initial results indicate that phases 1 and 2 are not experiencing this situation.

This seems to be the appropriate time to bring this information to Kolter. Perhaps Kolter can assist by facilitating the additional focus required between Dominion Energy and Power Plus Systems to remedy this problem as soon as possible.

There are many details supporting this information. I am willing to meet with you to review them and discuss next steps.

Regards,  
Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979

**Part B Response Email # 5** My 10/1/2020 Email to Kimberly Eads where I advised her that the problem also affected another house in the Cresswind Community.

**From:** Mike Hochgraf <mikehoch@icloud.com>  
**Sent:** Thursday, October 1, 2020 9:52 AM  
**To:** 'kimberly.eads@dominionenergy.com' <kimberly.eads@dominionenergy.com>  
**Subject:** AFCI Information - Cresswind Community Circuit Breaker Problem

Good evening Kimberly,

It was nice meeting you (even though it was on the phone). Here is some information for your review.

Attachments

- Eaton data sheet PDF
- Photo 3357 – breaker box one of my neighbors in phase 4 – August 17, 2020 5:30 AM power failure
- Photo 3892 – breaker box my house in phase 3 – August 17, 2020 5:30 AM power failure
- My Excel spreadsheet circuit breaker fault log (attached below)
- Color code explanation of various AFCI

Spreadsheet Fault LOG for my house

Fault Date: _06/05/2020 approx 5:00 AM Duration ____				Fault Date: 08/06/2020 2:30 PM Duration 30 minutes				Fault Date: 08/17/2020 5:30 AM Duration 35 minutes			
Breaker	AMP Rating	Breaker Color	Blink Pattern (count)	Breaker	AMP Rating	Breaker Color	Blink Pattern (count)	Breaker	AMP Rating	Breaker Color	Blink Pattern (count)
				9	20	blue	6	5	20	white	n/a on white
				14	20	blue	5	7	20	blue	6
		no breakers tripped		18	20	blue	5	14	20	blue	5
				23	15	white	n/a on white	16	20	blue	6
				26	20	white-blue	5	18	20	blue	6
								21	15	white	n/a on white
								23	15	white	n/a on white
								26	20	white-blue	6
								28	20	white-blue	6

**DESC's Interpretation of Mr. Hochgraf Allegation #3**

Mr. Hochgraf alleges that DESC "advised [him] that this is not a 'normal' condition and that this is unique to sections within [his] new community."

**DESC Answer #3:**

DESC denies this allegation. It is perfectly normal for a breaker to trip during an outage and a breaker tripping during an outage is not unique to the Cresswind community. DESC admits that, in October 2020, when Mr. Hochgraf described to Ms. Eads and Mr. Gilbert on their visit to his residence the randomness of breakers tripping during outages with different breakers tripping from event to event, Mr. Gilbert indicated that he found that randomness "odd"; however, DESC avers that, during that same conversation, Ms. Eads explained in detail why such operation of AFCI/GFCI breakers was not so uncommon. DESC has received no complaints from others in Mr. Hochgraf's community regarding persistent, "multiple simultaneous AFCI trips" like those that Mr. Hochgraf is allegedly experiencing in his residence. Furthermore, DESC avers that its service is reliable and that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1.

**Hochgraf Response # 3**

I am without sufficient information to form a reasonable belief as to the truth of DESC's statement that "It is perfectly normal for a breaker to trip during an outage and a breaker tripping during an outage is not unique to the Cresswind community". DESC has not presented any evidence of codes or standards to support their assertion that this is a "normal" condition.

The reliability of DESC power during normal operation is not relevant to this matter. What I am alleging is that the power delivered to my house as it is failing during a power outage event causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the interruption.

**DESC's Interpretation of Mr. Hochgraf Allegation #4**

Mr. Hochgraf alleges that "[w]hen this power outage situation occurs, as it did most recently on April 6, 2021 at approximately 2 PM, the tripped circuit breakers must be manually reset to restore power to the affected areas in the house." DESC Answer #4: DESC admits that its system experienced an outage affecting Mr. Hochgraf's service on April 6, 2021, at 2:09 p.m. which lasted for approximately 16 seconds. DESC admits that if and when a circuit breaker trips during a power outage or any other time, it must be manually reset.

**Hochgraf Response # 4**

I do not dispute DESC's statement that "DESC admits that if and when a circuit breaker trips during a power outage or any other time, it must be manually reset."

**DESC's Interpretation of Mr. Hochgraf Allegation #5**

Mr. Hochgraf alleges that “[a]s a result of the April 6 power outage, I had 50% (9 of 18) of my AFCI circuit breakers trip which I had to manually reset.”

DESC Answer #5:

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegation that “50% (9 of 18) of [Mr. Hochgraf's] AFCI circuit breakers trip[ped]” during the April 6, 2021 outage. DESC avers that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1.

**Hochgraf Response # 5**

I acknowledge that this point is unclear solely because I forgot to add the photo of my tripped breakers that I referenced in my email below (highlighted for emphasis). However, neither Kimberly Eads nor Richard Gilbert advised me of the missing attachment which was central to the email. I have copied the missing photo immediately below the email. I took the photo on 4/6/2021. If necessary, I can provide the photo metadata to prove this photo was taken on 4/6/2021.

**From:** Mike Hochgraf <mikehoch@icloud.com>

**Sent:** Tuesday, April 6, 2021 4:46 PM

**To:** 'kimberly.eads@dominionenergy.com' <kimberly.eads@dominionenergy.com>; 'richard.gilbert@dominionenergy.com' <richard.gilbert@dominionenergy.com>

**Subject:** Cresswind (The Ponds) Power Interruption Tuesday 04/06/2021 @ 2:15 PM (duration about 5 minutes)

**Importance:** High

Good afternoon Kimberly, Richard,

This is to follow-up on the long-standing circuit breaker tripping issue in the Cresswind (Ponds) development.

This afternoon at approximately 2:15 PM, the Crestwood development (and the Ponds) experienced a brief power outage. I have received multiple reports of multiple breakers within the Cresswind Community.

As you recall, you both performed a one-month instrument audit of the power delivery in my house in November/December 2020 and found it to be within specs. At the same time, Power Plus Systems (the electrical service installer for the entire development) replaced my breakers back on 11/23/2020 with the new Eaton “TL” version, supposedly resistant to power sags.

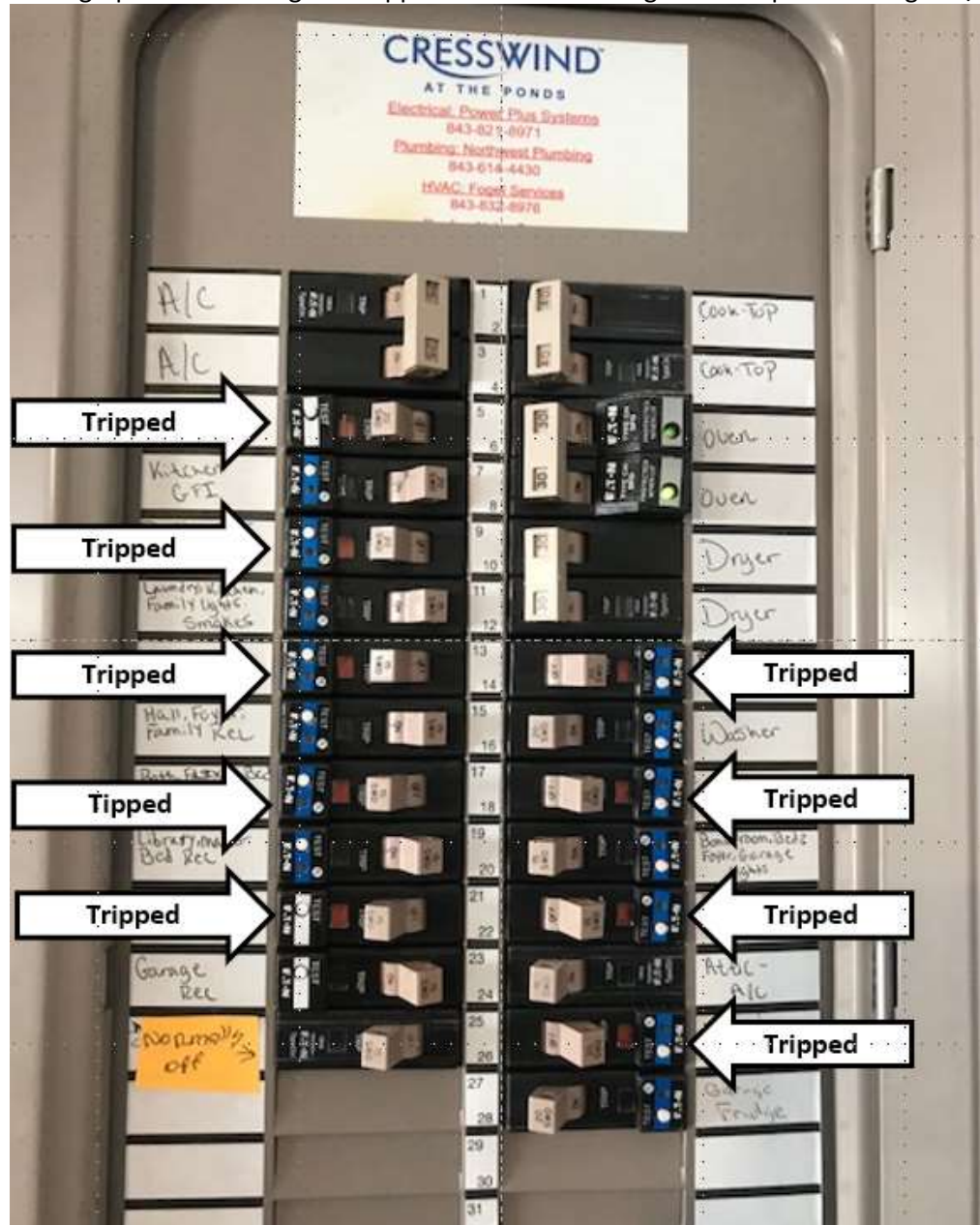
We haven't spoken recently because the power delivery has been stable. When we last spoke, you said to contact you if/when we have any problems. I've attached a photo of my breakers. Please note the symmetry – **every other breaker tripped.**

Was there anything in today power interruption that would explain the widespread problem with our circuit breakers tripping?

What can be done to resolve this ongoing issue and ensure this doesn't continue to occur?

Regards,  
Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

Photograph of Mr. Hochgraf's tripped breakers resulting from the power outage 04/06/2021





**DESC's Interpretation of Mr. Hochgraf Allegation #6**

Mr. Hochgraf further alleges that "other recent power failures with resulting multiple circuit breaker failures" occurred on August 6, 2020, at approximately 2:30 PM, and on August, 17, 2020, at approximately 5:30 AM. DESC Answer #6: DESC admits that its system experienced an outage affecting Mr. Hochgraf's service on August 6, 2020, at 2:05 p.m. which lasted for 14 minutes. DESC denies that its system experienced an outage affecting Mr. Hochgraf's service on August 17, 2020, but admits that its system experienced an outage affecting Mr. Hochgraf's service on August 18, 2020, at 5:26 a.m. which lasted for 35 minutes. DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegations that of "multiple circuit breaker failures" inside his home during these outages. DESC avers that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1.

**Hochgraf Response # 6**

I agree that the date of the outage could be August 18, 2020 instead of August 17, 2020, however that does not change the fact that I did advise DESC of – "multiple circuit breaker failures" inside his home during these outages." – in my email dated 10/01/2020 to Kimberly Eads. See email immediately below. The pertinent information is in the right quadrant of the graphic in the email..

**From:** Mike Hochgraf <mikehoch@icloud.com>

**Sent:** Thursday, October 1, 2020 9:52 AM

**To:** 'kimberly.eads@dominionenergy.com' <kimberly.eads@dominionenergy.com>

**Subject:** AFCI Information - Cresswind Community Circuit Breaker Problem

Good evening Kimberly,

It was nice meeting you (even though it was on the phone). Here is some information for your review.

**Attachments**

- Eaton data sheet PDF
- Photo 3357 – breaker box one of my neighbors in phase 4 – August 17, 2020 5:30 AM power failure
- Photo 3892 – breaker box my house in phase 3 – August 17, 2020 5:30 AM power failure
- My Excel spreadsheet circuit breaker fault log (attached below)
- Color code explanation of various AFCI

Fault LOG for my house

Fault Date: _06/05/2020 approx 5:00 AM Duration ____				Fault Date: 08/06/2020 2:30 PM Duration 30 minutes				Fault Date: 08/17/2020 5:30 AM Duration 35 minutes			
Breaker	AMP Rating	Breaker Color	Blink Pattern (count)	Breaker	AMP Rating	Breaker Color	Blink Pattern (count)	Breaker	AMP Rating	Breaker Color	Blink Pattern (count)
				9	20	blue	6	5	20	white	n/a on white
				14	20	blue	5	7	20	blue	6
	no breakers tripped			18	20	blue	5	14	20	blue	5
				23	15	white	n/a on white	16	20	blue	6
				26	20	white-blue	5	18	20	blue	6
								21	15	white	n/a on white
								23	15	white	n/a on white
								26	20	white-blue	6
								28	20	white-blue	6

**DESC's Interpretation of Mr. Hochgraf Allegation #7**

Mr. Hochgraf further alleges that "[t]his circuit breaker tripping problem is greatly disturbing my life. It greatly diminishes the effectiveness of our standby generator, and has resulted in spoiled food in our refrigerator."

DESC Answer #7: DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegations. DESC avers that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1.

**Hochgraf Response # 7**

When I am away from my residence and there is a power outage which causes circuit breakers to trip, certain critical appliances are without power, (such as refrigerators, freezers) until they are manually reset. I purchased a standby generator to ensure my critical appliances would not be without power during a power outage. Because of the tripped circuit breakers, my standby generator is not able to power those devices on the tripped circuits until the breakers are manually reset. This could be hours or days until I return home and reset the tripped breakers.

**DESC's Interpretation of Mr. Hochgraf Allegation #8**

Mr. Hochgraf further alleges that "this problem appears to be limited in the Cresswind development to phases 3, 4, and 5" and that "phases 1 and 2 are not affected."

DESC Answer #8: DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegations. DESC has received no complaints from others in Mr. Hochgraf's community regarding persistent, "multiple simultaneous AFCI trips" like those that Mr. Hochgraf is allegedly experiencing in his residence. See DESC Answer #3. DESC avers that it is not responsible for the operation of the circuit breakers in its customers' residences. See DESC Answer #1.

**Hochgraf Response # 8**

See Hochgraf response # 2 which proves this problem is "widespread within the Cresswind development and appears limited to phases 3, 4, and 5" and that "phases 1 and 2 are not affected."

**DESC's Interpretation of Mr. Hochgraf Allegation #9**

Mr. Hochgraf further alleges that "[t]here is a widespread situation in the Cresswind community whereby AFCI circuit breakers trip after/during a power outage;" that "[t]his is not normal circuit breaker tripping, but rather multiple simultaneous AFCI trips immediately upon power failure (and perhaps upon a brief attempt on power restore)."

**DESC Answer #9:**

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegation. DESC has received no complaints from others in Mr. Hochgraf's community regarding persistent, "multiple simultaneous AFCI trips" like those that Mr. Hochgraf is allegedly experiencing in his residence. See DESC Answer #3. If there is such a situation, DESC would not expect to receive such reports since circuit breakers tripping is a problem for the homeowner to resolve with a third party, not DESC. DESC avers that it is not responsible for the operation of the circuit breakers in its customers' residences. See DESC Answer #1.

**Hochgraf Response # 9**

See Hochgraf response # 2 which proves that "there is a widespread situation in the Cresswind community whereby AFCI circuit breakers trip after/during a power outage;" that "[t]his is not normal circuit breaker tripping, but rather multiple simultaneous AFCI trips immediately upon power failure (and perhaps upon a brief attempt on power restore)."

**DESC's Interpretation of Mr. Hochgraf Allegation #10**

Mr. Hochgraf further alleges that "both [DESC] and Power Plus Systems ([t]he only electrical company used in [his] community) concur that circuit breakers tripping in this manner are not a normal condition."

**DESC Answer #10:**

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegation regarding Power Plus Systems' belief. DESC denies the allegation as it relates to DESC.

**Hochgraf Response # 10**

Based upon DESC failing to take ownership of the problem, and the lack of corroborating evidence from DESC that breakers tripping on power outage are "normal", DESC is implying that the breakers are somehow "defective".

I am including a letter from **Eaton**, marked "**Hochgraf Exhibit 'A'**". Eaton manufactures the circuit breakers used in the Cresswind community and installed by Power Plus Systems. This letter states Eaton's conclusion "Some external condition is causing these breakers to trip, not a flaw with the breaker itself." The Eaton letter indicates the historical nature of the circuit breaker problems, that the problem is widespread within Cresswind, and that Eaton believes that "Some external condition is causing these breakers to trip, not a flaw with the breaker itself."



Powering Business Worldwide

Eaton  
Commercial and Residential Distribution Solutions  
1000 Cherrington Parkway  
Moon Township, PA 15108  
Jayhaugen@eaton.com  
856-994-4192

To: Chris Waltz  
Power Plus Systems

From: Jay Haugen, Product Manager, Miniature Circuit Breakers

Date: 18 June 2021

Subject: Circuit Breakers Tripping During Power Outages in the Cresswind Neighborhood

I have been closely following problems with tripping Eaton circuit breakers in the Cresswind neighborhood. It is my understanding that many houses throughout the neighborhood have Eaton circuit breakers trip whenever the power goes out. It is also my understanding that different breakers trip during every power outage, and there is no way of predicting which circuit will trip during the next outage. Finally, it is my understanding that the breakers always report a "5" blink when restarted, indicating a ground fault or grounded neutral condition.

All major troubleshooting issues with Eaton's residential circuit breakers pass through my team. I am sure that this issue is unique to the Cresswind neighborhood. Given that this issue is localized to the Cresswind neighborhood and given that this issue has not been seen in other neighborhoods with CH electronic breakers, I believe my breakers are functioning as designed. Some external condition is causing these breakers to trip, not a flaw with the breaker itself.

Please feel free to contact me with any questions or concerns.

<<signed>>

Jay Haugen, Product Manager

**Hochgraf Exhibit "A"**

**DESC's Interpretation of Mr. Hochgraf Allegation #11**

Mr. Hochgraf further alleges that "the problem began before 2020, but has been formally documented starting in June 2020" and that "[o]n April 6, 202[1], we experienced another power outage with widespread examples of circuit breakers tripping upon power failure."

**DESC Answer #11:**

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegations that "the problem began before 2020" and that there were "widespread examples of circuit breakers tripping" during the power outage on April 6, 2021. DESC avers that its service is reliable and that it is not responsible for the operation of the circuit breakers in Mr. Hochgraf's residence. See DESC Answer #1. DESC admits that, by email dated October 1, 2020, Mr. Hochgraf provided Ms. Eads with what he characterized as a "Fault LOG" for his house. Mr. Hochgraf's "Fault LOG" identified "faults" on June 5, 2020; August 6, 2020, and August 17, 2020. (On information and belief, DESC avers that Mr. Hochgraf incorrectly identified August 17, 2020, as a date on which a fault occurred. See DESC Answer #6.). Mr. Hochgraf indicated that no tripping occurred on June 5, 2020. For the other two events, Mr. Hochgraf's log provided a breaker number, breaker AMP Rating, breaker color, and breaker blink pattern.

**Hochgraf Response # 11**

I agree that the "problem before 2020" was not sufficiently documented. However, beginning with the power outage on August 6, 2020, I continually improved my data collection methods.

Mr. Gilbert had advised me during one of our telephone calls in September 2020, that he would seek assistance from EPRI concerning my problem.

From the EPRI website:

The Electric Power Research Institute (EPRI) conducts research, development, and demonstration projects for the benefit of the public in the United States and internationally. As an independent, nonprofit organization for public interest energy and environmental research, we focus on electricity generation, delivery, and use in collaboration with the electricity sector, its stakeholders and others to enhance the quality of life by making electric power safe, reliable, affordable, and environmentally responsible.

I have enclosed an email sent to me from Mr. Gilbert dated September 28, 2020 subject "FW: Some Feedback from EPRI FW: Hotline Questions: AFCI".

This email contains internal correspondence between Kimberly Eads and Mr. Gilbert, and also some [EXTERNAL] source, not identified. The email proves:

- DESC was using my data, and provided it to EPRI, and DESC was aware that the problem was widespread in Cresswind and also limited to certain sections within Cresswind. It appears that the following statements in the email are from ERPI:
  - "It's too bad that so many people are being affected but from a solution solving perspective it might be a good thing."
  - "Since "A large number of homeowners are keeping logs of all the dates and times that their AFCI breakers trip."" Perhaps those people might be contacted and a determination of AFCI breaker model and type might be determined?"
  - "Since the homes in the first two phases are not being affected, perhaps they have different panels and breakers"



**From:** RICHARD GILBERT <richard.gilbert@dominionenergy.com>  
**Sent:** Monday, September 28, 2020 9:39 AM  
**To:** mikehoch@icloud.com  
**Subject:** FW: Some feedback from EPRI FW: Hotline Question: AFCI's

**From:** KIMBERLY EADS (DESC Trans Distribution - 7) <[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)>  
**Sent:** Thursday, September 17, 2020 3:09 PM  
**To:** RICHARD GILBERT (DESC Trans Distribution - 7) <[richard.gilbert@dominionenergy.com](mailto:richard.gilbert@dominionenergy.com)>  
**Subject:** Some feedback from EPRI FW: Hotline Question: AFCI's

**Subject:** [EXTERNAL] Re: Hotline Question: AFCI's

I think the most common cause of nuisance tripping of these AFCIs is compatibility with the loads and technologies that are connected on the circuit, especially protection circuits for the devices on the circuit. For instance, MOVs and capacitors in surge protectors may operate on transients that occur when there is a disturbance in the supply (like the waveforms Doug provided). I wonder if the homes in the later phases of the development may have newer models of devices (appliances, led lighting with dimmers, power supplies for electronic equipment, electronic motor drives in refrigerators or other devices, etc.) that might be more susceptible to leakage currents during transient conditions.

**To:** "[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)" <[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)>  
**Subject:** RE: Hotline Question: AFCI's

Kimberly,

I hope you are doing well.

I've been asked to work on this Hotline issue regarding AFCI's.

It's too bad that so many people are being affected but from a solution solving perspective it might be a good thing. Here's some thoughts and questions:

1. Since this is large development is it possible the same make and model of panel and AFCI breakers are being used?
  - a. If so, then perhaps there's an issue with that specific AFCI.
  - b. Since "A large number of homeowners are keeping logs of all the dates and times that their AFCI breakers trip." Perhaps those people might be contacted and a determination of AFCI breaker model and type might be determined?
  - c. Are just one AFCI in the breaker panel tripping or just one?
    - i. If just one, then what load is served?
2. Since the homes in the first two phases are not being affected, perhaps they have different panels and breakers.
  - a. Can you find out if the panels and AFCI breakers are different make and model?
    - i. If same model perhaps it's the year they were manufactured.
3. Do you have PQ data of a voltage sag that resulted in an AFCI?
  - a. If so and we can get an identical model AFCI we might be able to recreate the sag and see if the AFCI trips. It might be a AFCI power supply issue.

4. If multiple brand AFCI's are being affected then, perhaps it might be the AFCI response to the load responding to the voltage sag. For example:
  - a. Let's say a load has a relay or contactor as part of it's control circuit and that load is connected to the load side of the AFCI. During the voltage sag, the relay or contactor chattering due to the voltage sag might cause the AFCI to sense the arcing from the chatter and trip.
5. I'll check to see what information we might have regarding how they work. It might just be a link from an internet search that we can provide.

**Subject:** RE: Hotline Question

Hi Kimberly,

Nice talking with you also, and thanks for the inquiry. For whatever reason, we have been hearing a lot about AFCI breakers recently.

I'm cc'ing our PQ Hotline incoming email to get this into our system.

CONFIDENTIALITY NOTICE: This electronic message contains information which may be legally confidential and or privileged and does not in any case represent a firm ENERGY COMMODITY bid or offer relating thereto which binds the sender without an additional express written confirmation to that effect. The information is intended solely for the individual or entity named above and access by anyone else is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution, or use of the contents of this information is prohibited and may be unlawful. If you have received this electronic transmission in error, please reply immediately to the sender that you have received the message in error, and delete it. Thank you.

**DESC's Interpretation of Mr. Hochgraf Allegation #12**

Mr. Hochgraf further alleges that "[b]eginning in 2020, [he] ha[s] been in personal contact with both [DESC] (Richard Gilbert, Manager of Electrical Distribution Operations, Summerville) and Chris Waltz (CEO of Power Plus Systems)" and that "[b]oth companies acknowledge this is a unique problem to Cresswind, and particularly 'interesting' that it is limited to phases 3, 4, and 5" and not phases 1 and 2.

**DESC Answer #12:**

DESC admits that Mr. Hochgraf contacted Mr. Gilbert in 2020. DESC denies Mr. Hochgraf's allegation that DESC "acknowledge[s] this is a unique problem to Cresswind and particularly 'interesting' that it is limited to phases 3, 4, and 5." See DESC Answer #3. DESC avers that it has not received any reports from other customers regarding persistent "multiple simultaneous" tripping of AFCI breakers in the other phases of the Cresswind community.

**Hochgraf Response # 12**

I stand by my statement that "DESC "acknowledges this is a unique problem to Cresswind and particularly 'interesting' that it is limited to phases 3, 4, and 5."

DESC has not proven that it has not received any reports from other customers regarding persistent "multiple simultaneous" tripping of AFCI breakers in the other phases of the Cresswind community. I can assist with helping to satisfy DESC's request to receive reports from other customers regarding persistent "multiple simultaneous" tripping of AFCI breakers in the other phases of the Cresswind community. This can be corrected for future power outages. Therefore, I request that DESC provide email contact information for those residents wishing to report circuit breaker failures as the result of a power outage. This will provide an electronic record for both DESC and the resident. This will instill confidence and improve the outcome.

**DESC's Interpretation of Mr. Hochgraf Allegation #13**

Mr. Hochgraf further alleges that "[r]egarding the power outage on April 6, 2021, Chris Waltz, [the CEO of Power Plus Systems,] followed up with Eaton Engineering (the circuit breaker manufacturer) on [Mr. Hochgraf's] notification email to [Mr. Waltz] on April 6, 2021, wherein [Mr. Hochgraf] notified [Mr. Waltz] (and [DESC]) that [Mr. Hochgraf] had 9 circuit breakers trip from the power outage.

**DESC Answer #13:** DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegation regarding whether Mr. Waltz followed up with Eaton Engineering regarding Mr. Hochgraf's outage on April 6, 2021.

**Hochgraf Response # 13**

The letter included below from **Eaton**, Commercial and Residential Distribution Solutions, from Mr. Jay Haugen, P.E., Product Manager is proof that Mr. Waltz and Eaton used my data and photograph from the April 6, 2021 power outage. Mr. Haugen used the April 6, 2021 power outage information and photograph supplied by me, in addition to previous data supplied by me, to develop his opinion offered in his letter below, marked **"Hochgraf Exhibit "A"**.



Powering Business Worldwide

Eaton  
Commercial and Residential Distribution Solutions  
1000 Cherrington Parkway  
Moon Township, PA 15108  
Jayhaugen@eaton.com  
856-994-4192

To: Chris Waltz  
Power Plus Systems

From: Jay Haugen, Product Manager, Miniature Circuit Breakers

Date: 18 June 2021

Subject: Circuit Breakers Tripping During Power Outages in the Cresswind Neighborhood

I have been closely following problems with tripping Eaton circuit breakers in the Cresswind neighborhood. It is my understanding that many houses throughout the neighborhood have Eaton circuit breakers trip whenever the power goes out. It is also my understanding that different breakers trip during every power outage, and there is no way of predicting which circuit will trip during the next outage. Finally, it is my understanding that the breakers always report a "5" blink when restarted, indicating a ground fault or grounded neutral condition.

All major troubleshooting issues with Eaton's residential circuit breakers pass through my team. I am sure that this issue is unique to the Cresswind neighborhood. Given that this issue is localized to the Cresswind neighborhood and given that this issue has not been seen in other neighborhoods with CH electronic breakers, I believe my breakers are functioning as designed. Some external condition is causing these breakers to trip, not a flaw with the breaker itself.

Please feel free to contact me with any questions or concerns.

<<signed>>

Jay Haugen, Product Manager

"Hochgraf Exhibit "A".

**DESC's Interpretation of Mr. Hochgraf Allegation #14**

Mr. Hochgraf further alleges that "Power Plus Systems replaced all 25 of my Arc Fault circuit breakers on 11/23/2020 . . . at the direction of Eaton Engineering" and that "the new circuit breakers were the latest and redesigned 'TL' version," which were "supposed to eliminate the tripping-on-power-fail problem" but did not.

**DESC Answer #14:**

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegation regarding the actions of Power Plus Systems and Eaton Engineering.

**Hochgraf Response # 14**

The email below (I deleted extraneous text with no bearing on this topic) provides sufficient information for DESC to believe my statement regarding the actions of Power Plus Systems and Eaton Engineering.

**From:** Chris Waltz <chris@ppselectrical.com>

**Sent:** Tuesday, December 8, 2020 8:36 PM

**To:** Mike Hochgraf <mikehoch@icloud.com>

**Subject:** Re: Follow up request ----- Circuit Breaker Issue - Cresswind (Breakers trip on power failure)

Hey Mike,

#4. Your house should absolutely not have an issue with the breakers tripping due to an an outage as the breakers have been redesigned not to see the failing power grid.

Best,

Chris Waltz

---

On Dec 4, 2020, at 9:33 AM, Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)> wrote:

Good morning Chris,

I just wanted to follow up on this and submit something for your review:

On Monday 11/23/2020, pursuant to resolving the circuit breaker tripping issue, Jeremy replaced my AFCI breakers with the newest version from Eaton. Most of them are identified with a "TL" from Eaton

- Since my house has the new-version breakers, the expectation is that a future (brown-out first) power outage will not trip breakers as has happened in the past.

Thanks in advance,

Regards,

Mike Hochgraf

3144 Cross Vine Lane

**DESC's Interpretation of Mr. Hochgraf Allegation #15**

Mr. Hochgraf further alleges that "Chris Waltz told [him] on April 6, 2021, that the Eaton Engineers looked at the photo I sent of my tripped breakers and absolutely concluded that the pattern of the failed circuit breakers ('A' leg, 'phasing' problem) was caused by a power supply problem, not associated with a normal power outage."

**DESC Answer #15:**

DESC is without sufficient information to form a reasonable belief as to the truth of Mr. Hochgraf's allegations regarding what the Eaton Engineers may have stated to Mr. Waltz and what Mr. Waltz may have stated to Mr. Hochgraf and demands strict proof of each of these hearsay statements. DESC denies that the tripped breakers on April 6, 2021, if any, were caused by a power supply problem to Mr. Hochgraf's home. DESC avers it is providing reliable service, and there is no "power supply problem" to Mr. Hochgraf's residence. See DESC Answers #1 and #16.

**Hochgraf Response # 15**

In my Response # 2, Email # 4, I provided an email where I summarized these statements. I have attached a letter dated June 18, 2021 from Eaton Commercial and Residential Distribution Solutions which was sent to Mr. Chris Waltz, CEO of Power Plus Systems. The letter supports my statements concerning Eaton's belief that their circuit "breakers are functioning as designed", and that "some external condition is causing these breakers to trip, not a flaw with the breaker itself." "**Hochgraf Exhibit "A"**".

As I stated in my previous responses, the reliability of DESC power during normal operation is not relevant to this matter. What I am alleging is that the power delivered to my house as it is failing during a power outage event causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.



Powering Business Worldwide

Eaton  
Commercial and Residential Distribution Solutions  
1000 Cherrington Parkway  
Moon Township, PA 15108  
Jayhaugen@eaton.com  
856-994-4192

To: Chris Waltz  
Power Plus Systems

From: Jay Haugen, Product Manager, Miniature Circuit Breakers

Date: 18 June 2021

Subject: Circuit Breakers Tripping During Power Outages in the Cresswind Neighborhood

I have been closely following problems with tripping Eaton circuit breakers in the Cresswind neighborhood. It is my understanding that many houses throughout the neighborhood have Eaton circuit breakers trip whenever the power goes out. It is also my understanding that different breakers trip during every power outage, and there is no way of predicting which circuit will trip during the next outage. Finally, it is my understanding that the breakers always report a "5" blink when restarted, indicating a ground fault or grounded neutral condition.

All major troubleshooting issues with Eaton's residential circuit breakers pass through my team. I am sure that this issue is unique to the Cresswind neighborhood. Given that this issue is localized to the Cresswind neighborhood and given that this issue has not been seen in other neighborhoods with CH electronic breakers, I believe my breakers are functioning as designed. Some external condition is causing these breakers to trip, not a flaw with the breaker itself.

Please feel free to contact me with any questions or concerns.

<<signed>>

Jay Haugen, Product Manager

"Hochgraf Exhibit "A".



**DESC's Interpretation of Mr. Hochgraf Allegation #16**

Mr. Hochgraf further alleges that DESC "performed a six-week instrument analysis (October – November 2020) of the power delivered to [his] house" and that "[a]t the conclusion of the test/analysis, DESC advised [him] that the delivered power was 'within specs.'"

**DESC Answer #16:** DESC denies that it conducted a "six-week instrument analysis" of the power delivered to Mr. Hochgraf's home, but admits that it installed a monitor to record the voltage at Mr. Hochgraf's residence for two weeks from October 20, 2020, to November 2, 2020. DESC further admits that, at the conclusion of the monitoring, DESC advised Mr. Hochgraf that the delivered power was "within specs," i.e., the voltage was within +/- 10% of the standard average voltage during the monitoring period. See Commission Regulation 103-363 ("The voltage variations for service should not exceed 10% above or below the standard average voltage.").

**Hochgraf Response # 16**

I was onsite (in front of my house) for the installation on October 20, 2020 at approximately 9 AM, so I am aware when the test began. However, I was not aware of the date Dominion removed the test device, and emailed Kimberly Eads and Richard Gilbert on 12/08/2020 requesting status of the test. Kimberly Eads replied on 12/09/2020 that the test was completed. See email below. However, I maintain that the test was inconclusive because there was not a power outage during the test period. What data should have been collected was what happens to the power supply during a power outage.

As I stated in my previous responses, the reliability of DESC power during normal operation is not relevant to this matter. What I am alleging is that the power delivered to my house as it is failing during a power outage event causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.

**From:** KIMBERLY EADS <kimberly.eads@dominionenergy.com>

**Sent:** Wednesday, December 9, 2020 4:04 PM

**To:** Mike Hochgraf <mikehoch@icloud.com>

**Cc:** RICHARD GILBERT <richard.gilbert@dominionenergy.com>

**Subject:** Re: RE: Cresswind (The Ponds) Power Interruption Saturday 11/14/2020 @ 10:40 AM

Mike,

I have reviewed the data file from the monitor and the voltage was well within tolerances. There was one typical utility voltage sag event on October 30 around midnight and I have asked Richard to see if he can look at the OMS system to see what occurred .

Regards,  
Kimberly Eads, PE  
Senior Engineer,  
Power Quality

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**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Tuesday, December 8, 2020 1:29:52 PM  
**To:** KIMBERLY EADS (DESC Trans Distribution - 7) <[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)>  
**Cc:** RICHARD GILBERT (DESC Trans Distribution - 7) <[richard.gilbert@dominionenergy.com](mailto:richard.gilbert@dominionenergy.com)>  
**Subject:** [EXTERNAL] RE: Cresswind (The Ponds) Power Interruption Saturday 11/14/2020 @ 10:40 AM

\*\*\*This is an EXTERNAL email that was NOT sent from Dominion Energy. Are you expecting this message? Are you expecting a link or attachment? DO NOT click links or open attachments until you verify them\*\*\*

Good afternoon Kimberly,

Following up on the power monitoring device you place outside my house recently.

Have you concluded the testing of the power quality being delivered to my house?

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

**From:** Mike Hochgraf <[mikehoch@icloud.com](mailto:mikehoch@icloud.com)>  
**Sent:** Monday, November 16, 2020 10:09 AM  
**To:** 'kimberly.eads@dominionenergy.com' <[kimberly.eads@dominionenergy.com](mailto:kimberly.eads@dominionenergy.com)>  
**Cc:** 'richard.gilbert@dominionenergy.com' <[richard.gilbert@dominionenergy.com](mailto:richard.gilbert@dominionenergy.com)>  
**Subject:** Cresswind (The Ponds) Power Interruption Saturday 11/14/2020 @ 10:40 AM

Good morning,

Just to update you since the power is being monitored at the electrical box on my property.

On Saturday 11/14/2020 at 10:40 AM, we had a power interruption. It lasted about 1 second after which it was restored fully unlike some previous power interruptions which failed to restore fully on the first attempt. Didn't last long enough for generators to activate.

There were minimal reports for AFCI breakers tripping, perhaps due to the short duration. I anticipate receiving notifications from the people monitoring for me as they realize something may not be working. I noticed it because I was using a light using house power.

Regards,

Mike Hochgraf  
3144 Cross Vine Lane  
Summerville, SC 29483  
Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)

**DESC's Interpretation of Mr. Hochgraf Allegation #17**

Mr. Hochgraf further alleges that he advised DESC that "the only relevant data [he] required was not analyzed – that of what occurs during a power failure" because there was no power outage during the test period.

**DESC Answer #17:**

DESC admits Mr. Hochgraf made this statement to DESC; however, DESC denies that "what occurs during a power failure" is relevant data that still needs to be analyzed and avers that it explained to Mr. Hochgraf why this data was not necessary at the time Mr. Hochgraf made his alleged statement. DESC avers that the voltage was measured for a sufficient length of time to determine that there is not a power supply problem to Mr. Hochgraf's residence. AFCI and GFCI nuisance trips are a known issue that has not been resolved by the various appliance or breaker manufacturers at this time.

**Hochgraf Response # 17**

I have never complained about "nuisance trips" as stated by DESC. All my data concerns circuit breakers that trip as the result of a power outage. I was near my circuit breaker panel at the beginning of the power outage and heard the circuit breakers trip as soon as power was lost.

As I previously stated in my previous responses, the reliability of DESC power during normal operation is not relevant to this matter. What I am alleging is that the power delivered to my house as it is failing during a power outage event causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.

**DESC's Interpretation of Mr. Hochgraf Allegation #18**

Mr. Hochgraf alleges that Mr. Gilbert has "failed to respond to [his] multiple emails and phone messages since April 6, 2021."

**DESC Answer #18:** DESC admits that Mr. Gilbert has not communicated to Mr. Hochgraf since April 6. DESC avers that it has repeatedly advised Mr. Hochgraf that there is no power supply issue to Mr. Hochgraf's home and that there is nothing further that DESC can do to resolve his problems with the breakers inside his house. DESC avers that it is not responsible for the operation of the circuit breakers in its customers' residences. See DESC Answer #1.

**Hochgraf Response # 18**

As shown in Hochgraf Response # 1, my April 6, 2021 email to Mr. Gilbert and Kimberly Eads was to continue dialog concerning this ongoing problem. I was just following his instructions as stated in my email – ... "When we last spoke, you said to contact you if/when we have any problems..."

DESC's admission that – "DESC admits that Mr. Gilbert has not communicated to Mr. Hochgraf since April 6, 2021." – indicated that DESC was no longer interested in resolving my problem. In my email and voice mails – ignored by Dominion – I was seeking help from them for my ongoing problem, which I thought was of interest to Dominion.

The reliability of DESC power during normal operation is not relevant to this matter; what I am alleging is that the power delivered to my house as it is failing during a power outage causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house.

DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.

**DESC's Statement Concerning Hochgraf Request for Relief**

In his Complaint form, Mr. Hochgraf requests that DESC "provide reliable electric service to [his] house that eliminates the historical problem whereby AFCI circuit breakers . . . trip upon power failure and/or upon power restoration" and that DESC "resolve this ongoing problem on an urgent basis . . . ."

DESC Response: As discussed above, DESC is providing reliable electric service to Mr. Hochgraf's house, and DESC is not responsible for the operation of the circuit breakers in Mr. Hochgraf's (or any other customer's) residence, which are installed by third parties and located downstream of the point at which DESC provides its service. Paragraph V.A. of the Company's Commission-approved General Terms & Conditions for Electric Service provide as follows:

The Company shall not be in any way responsible or liable for damages to or injuries sustained by the Customer or others, or by the equipment of the Customer or others by reason of the condition or character of Customer's wiring and equipment, or the wiring and equipment of others on the Customer's premises. The Company will not be responsible for the use; care or handling of electricity delivered to the Customer after it passes the service point. The Customer assumes responsibility and liability for damages and injuries caused by failures or malfunctions of Customer's equipment.

Mr. Hochgraf will need to work with an electrician and/or the manufacturer of the circuit breakers to resolve these issues with AFCI/GFCI breakers that have been installed in his home. By copy of this letter, DESC serves this answer upon Mr. Hochgraf as well as counsel for the ORS and encloses a certificate of service to that effect.

### **Hochgraf Response re Request for Relief**

My responses to DESC's statements have proven, among other points:

- This is a widespread problem within the Cresswind community which DESC was made aware of through my efforts.
- Further corroboration of the widespread circuit breaker tripping is provided regarding the most recent power outage on June 11, 2021. Supporting documentation is provided:
  - a. Detailed list of 35 Cresswind residents who were affected by the power outage **(combined into one PDF and marked Hochgraf Exhibit "B")**
  - b. Individual emails from each of the 35 Cresswind residents stating the number of circuit breakers that tripped as a result of the power outage. Some of the emails contain references to previous circuit breaker trips from previous power outages.
- An internal DESC email shows that DESC was aware of this widespread problem as I described and even forwarded my data to an outside agency for analysis (ERPI). Mr. Gilbert's email to me on 09/28/2020 is included in Hochgraf Response # 11.
- The reliability of DESC power during normal operation is not relevant to this matter; what I am alleging is that the power delivered to my house as it is failing during a power outage causes the circuit breakers to trip. The circuit breakers do not trip when I manually turn off the power from outside my house. DESC has not presented any empirical evidence regarding the quality of the power delivered at the time of the power outage.
- Dominion ignored my requests for assistance as of the 04/06/2021 power outage.
- Power Plus Systems and Eaton, working together on 11/23/2020, replaced all 25 of my AFCI breakers in an effort to pinpoint the problem. They installed the latest redesigned 'TL' version which still failed.
- The power testing performed by DESC at my house in October 2020 was incomplete because, as I advised Kimberly Eads and Richard Gilbert, the only relevant data we required was not analyzed – that of what occurs during a power failure. During the test period, there was not a power outage.
- Eaton, the manufacturer of the circuit breakers used in the Cresswind community and installed by Power Plus Systems, has provided a letter with their conclusion that "Some external condition is causing these breakers to trip, not a flaw with the breaker itself." See separate Eaton Email as an attachment. **Hochgraf Exhibit "A"**
- DESC has not presented any evidence of codes or standards to support their assertion that this is a "normal" condition.

In conclusion, I am respectfully requesting that

1. DESC installs a power monitoring device on my house until such time as there is another power outage that causes widespread circuit breaker trips within the Cresswind Community.
2. DESC provide the test results to me, Power Plus Systems, and Eaton

Thank you,  
 Michael Hochgraf  
 3144 Cross Vine Lane  
 Summerville, SC 29483  
 Cell: (610) 573-9979  
[mikehoch@icloud.com](mailto:mikehoch@icloud.com)